

Notice of Allowability

Application No.

10/578,784

Examiner

NGOCLAN T. MAI

Applicant(s)

OMORI ET AL.

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/16/2010.
2. ☒ The allowed claim(s) is/are 1,3-22,24-31,33-42 and 44-53.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 5/21/2010.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/ Roy King/
Supervisory Patent Examiner, Art Unit 1793

Claims 1, 3-9, 21-22, 24-31, 33-42 and 44-53 are allowable.

Claims 1-9 are directed to an allowable product. Pursuant to the procedures set forth in MPEP § 821.04(B), claims 10-20, directed to the process of making or using an allowable product, previously withdrawn from consideration as a result of a restriction requirement, are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Because all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, **the restriction requirement as set forth in the Office action mailed on 10/15/2009 is hereby withdrawn.** In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Claims 10-22 are also allowable.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicants' attorney Mr. Abraham J. Rosner on May 21, 2010.

The application has been amended as follows:

claim 1, line 2, after "layer" (first occurrence) insert --not containing silicon nitride--,

claim 10, line 2, after "layer" (first occurrence) insert --not containing silicon nitride--,

and

claim 22, line 2, after "layer" (first occurrence) insert --not containing silicon nitride--.

Claim 31, line 2, after "layer" (first occurrence) insert --not containing silicon nitride--.

Cancel claim 43.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Claim 1 as currently amended is drawn to "A niobium powder for capacitor comprising a niobium layer **not containing silicon nitride** and a mixed layer of silicon nitride and niobium, the mixed layer being present in the vicinity of the powder particle surface, wherein the thickness of the mixed layer is from 8 to 2,000 um. The support the limitation "not containing silicon nitride in the niobium layer" can be found throughout applicants' specification and particularly page 14, lines 23-30 and page 15, lines 28 page 16, line 2.

The prior art in general teach niobium powder comprising niobium or niobium compound and either silicon and nitrogen or silicon nitride. The prior art therefore teach silicon nitride throughout the niobium powder.

There is no teaching or suggestion of a niobium powder as recited in claim 1 which comprises two layers in which one layer is a niobium layer not containing silicon nitride and the other is a mixed layer comprising silicon nitride and niobium having certain thickness and being present in the vicinity of the powder particle surface. None of the prior art teach a method of making the claimed niobium powder by etching and impregnating the pores in the niobium powder with silicon nitride and closing the etched pores as recited in claim 10. The prior art neither teach a granulated niobium powder (recited in claim 22) nor niobium sintered body (recited in claim 31) comprising the claimed layers wherein the mixed layer is being present in the vicinity of the outer surface of the sintered body and in the vicinity of the in-pore surface. The prior art also fail to teach the claimed capacitor (recited in claims 41), electronic circuit (claim 52) or devices (claim 53) using the claimed capacitor

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGOCLAN T. MAI whose telephone number is (571)272-1246. The examiner can normally be reached on 8:30-5:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Roy King/
Supervisory Patent Examiner, Art Unit
1793

n.m.